

REMARKS

Applicants respectfully request reconsideration of this application as amended.

Claims 8-22 are pending. By this Amendment, Claims 9 and 16 have been amended to overcome the rejection under 35 U.S.C. § 112, second paragraph.

Claim 8 recites, *inter alia*, scanning and generating, for each expanded formula, Horn clauses to resolve in order to detect whether or not the formula is valid for each record. The Horn clauses expressing implications resolvent of the subformulas for each record scanned in positive clauses having a positive literal and in negative clauses having at least one negative literal. Claim 8 further recites storing the positive clauses in a stack of subformulas; storing, in a table of clauses, a representation of the negative clauses and the positive clauses, and resolving the table of clauses based on each positive clause encounter so as to generate either an output file or an action of the computer system.

Smaha is directed to a methodology similar to that discussed in Applicants' background discussed on page 1, lines 9-21, of the specification. As is readily apparent from Fig. 1 of Smaha, Smaha uses a specific process input mechanism 12 and a misuse engine that is a direct converter of received data into an output signal. However, while Smaha discloses system log file data 16 in a list of selected misuses, Smaha is entirely silent on whether specification formulas may be expanded into subformulas for each record of a log file; whether Horn clauses, having positive and negative clauses, may be generated for each expanded formula; whether a stack of subformulas, a table of clauses and a table of counters may be stored; and whether the table of clauses may be resolved, based on each positive clause, so as to generate either an output file or an action, as recited in independent Claims 8 and 15.

The Office Action points to Thuraisingham for the teaching of “a method for detecting security violations in a secure database wherein data and constraints are modeled into Horn clauses to process the security risk of the data and to obtain a conflict resolution.” The Office Action goes on to state “it will be obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Thuraisingham to the invention disclosed by Smaha. The motivation to combine enables the invention to utilize the consistency and completeness of Horn clause logic programs to determine the security threat as taught by Thuraisingham.”

Applicants would like to initially point out that Thuraisingham is entirely silent on whether Horn clauses, having positive and negative clauses, may be generated for each expanded formula; whether a stack of subformulas, a table of clauses and a table of counters may be stored; and whether the table of clauses may be resolved, based on each positive clause, so as to generate either an output file or an action, as recited in independent Claims 8 and 15. Moreover, none of the other cited references teach or suggest scanning and generating, *for each expanded formula*, Horn clauses to resolve in order to detect whether or not the formula is valid *for each record*, the Horn clauses expressing implications resolvent of the subformulas for *each record* scanned in positive clauses having a positive literal and in negative clauses having at least one negative literal as recited in independent Claim 8.

Additionally, Applicants respectfully submit that after a careful review of Schoning, and in particular pages 33-35, Schoning fails to overcome the deficiencies as noted above. Specifically, pages 33-35 of Schoning are directed toward a resolution theorem, is addressing a problem entirely different than the claimed invention and makes no mention whatsoever of storing the positive clauses in a stack

of subformulas, storing, in a table of clauses, a representation of the negative clauses and the positive clauses and storing, in a table of counters, a number of negative literals in each negative clause. This is especially clear in that positive and negative clauses are not even mentioned by Schoning. While the Office asserts these steps are “implied,” Applicants respectfully submit that neither the definition of “resolvent” on page 30 nor the resolution theorem on page 35 teach or suggest the claimed features.

Thus, a legal basis for supporting an obviousness-type rejection under 35 U.S.C. § 103 is not present. Specifically, there is no teaching or suggestion of each and every feature as set forth in the independent claims and, moreover, the motivation to combine the references is insufficient and contrary to well-established legal doctrines.

In that none of the cited references taken either alone or in combination teach or suggest each and every element of the independent claims and that, as Applicants respectfully submit, there is no motivation to combine the references that is legally supportable, the outstanding rejections are simply untenable and should be withdrawn. A Notice of Allowance is respectfully solicited. Should the Examiner believe that anything further is desirable in order to place the application in condition for allowance, the Examiner is respectfully requested to contact the Applicants’ representative at telephone number listed below.

The Commissioner is hereby authorized to charge to deposit account number 50-1165 (T2153-906593) any fees under 37 CFR § 1.16 and 1.17 that may be required by this paper and to credit any overpayment to that Account. If any extension of time

is required in connection with the filing of this paper and has not been separately requested, such extension is hereby requested.

Respectfully submitted,

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